PHYSICS LETTERS B

Abstracted/Indexed in: Current Contents: Physical, Chemical & Earth Sciences/INSPEC/Physics Briefs

Volume 375, numbers 1,2,3,4 **16 May 1996**

Contents

Instructions to authors v

Nuclei

Medium polarization effects on neutron matter superfluidity
H.-J. Schulze, J. Cugnon, A. Lejeune, M. Baldo and U. Lombardo 1

The role of breakup in near-barrier ^{6}Li + ^{208}Pb scattering
N. Keeley and K. Rusek 9

On the rms-radius of the deuteron
I. Sick and D. Trautmann 16

Unexpected properties of the scissors mode in the odd-mass nucleus ^{167}Er
C. Schlegel, P. von Neumann-Cosel, A. Richter and P. Van Isacker 21

Particles and fields

Asymmetric inflationary reheating and the nature of mirror universe
Z.G. Berezhiani, A.D. Dolgov and R.N. Mohapatra 26

Internal structure of black holes
F. Larsen and F. Wilczek 37

Quantum corrections to temperature and mass of 1 + 1 dilatonic black holes and the trace anomaly
O.B. Zaslavskii 43

Solvable models for radiating black holes and area-preserving diffeomorphisms
J. Cruz and J. Navarro-Salas 47

Thermal Wightman functions and renormalized stress tensors in the Rindler wedge
V. Moretti and L. Vanzo 54

On 2D gravity coupled to $c \leq 1$ matter in the Polyakov light-cone gauge
O. Andreev 60

High-order Virasoro gravity
C.-Z. Zha and W.-Z. Zhao 65

Ising spins on a gravitating sphere
C. Holm and W. Janke 69

$SU_q(n)$ gauge theory
A. Sudbery 75

***M*-theory on a Calabi-Yau manifold**
S. Ferrara, R.R. Khuri and R. Minasian 81

A quasi-Hopf algebra interpretation of quantum 3-*j* and 6-*j* symbols and difference equations
O. Babelon, D. Bernard and E. Billey 89

Massless BPS-saturated states on the two-torus moduli sub-space of heterotic string
K.-L. Chan and M. Cvetič 98

Excitations of D-strings, entropy and duality
S.R. Das and S.D. Mathur 103

World-sheet logarithmic operators and target space symmetries in string theory
I.I. Kogan and N.E. Mavromatos 111

Exact type IIB superstring backgrounds
S. Kar, A. Kumar and G. Sengupta 121

Towards effective topological gauge theories on spectral curves
A. Gorsky and A. Marshakov 127

On the invariance of the string partition function under duality
A.A. Kehagias 135

Soft scalar masses in string models with anomalous $U(1)$ symmetry
Y. Kawamura and T. Kobayashi 141

On non-Abelian duality in sigma models
N. Mohammedi 149

Low energy implications of minimal superstring unification
S. Khalil, A. Masiero and F. Vissani 154

Bogomol'nyi bounds and Killing spinors in $d = 3$ supergravity
J.D. Edelstein, C. Núñez and F.A. Schaposnik 163

Harmonic-superspace integrability of $N = 1$, $D = 6$ supersymmetric gauge theory
B.M. Zupnik 170

(Continued inside)

0370-2693(19960516)375:1-4;1-B

PHYSICS LETTERS B

Volume 375, numbers 1,2,3,4 **16 May 1996**

Contents

(Continued from page 4 of cover)

Duality and dynamical supersymmetry breaking in *Spin*(10) with a spinor
P. Pouliot and M.J. Strassler 175

A note on the effective soft SUSY-breaking Lagrangian below the GUT scale
R. Rattazzi 181

Holomorphy and dynamical scales in supersymmetric gauge theories
E. Dudas 189

Electric dipole moment constraints on phases in the constrained MSSM
T. Falk and K.A. Olive 196

Multiple production of $\mathcal{MSSM}$ neutral Higgs bosons at high-energy e^+e^- colliders
A. Djouadi, H.E. Haber and P.M. Zerwas 203

Goldstone bosons in the Gaussian approximation
A. Okopińska 213

On the physical interpretation of ϕ^4-theory for $m^2 > 0$
H.A. Al-Kuwari 217

Is the stable tau-neutrino really an allowable cold dark matter candidate?
D. Fargion, M.Yu. Khlopov, R.V. Konoplich and R. Mignani 223

Heavy physics effects on Higgs production at $\gamma\gamma$ colliders
J.M. Hernández, M.A. Pérez and J.J. Toscano 227

Constraints on quartic vector-boson interactions from *Z* physics
A. Brunstein, O.J.P. Éboli and M.C. Gonzalez-Garcia 233

The Gegenbauer Polynomial technique: the evaluation of a class of Feynman diagrams
A.V. Kotikov 240

Chiral symmetry at finite *T*, the phase of the Polyakov loop and the spectrum of the Dirac operator
M.A. Stephanov 249

Performance tests of the Kramers equation and boson algorithms for simulations of QCD
K. Jansen, C. Liu and B. Jegerlehner 255

Topological charge and $U(1)_A$ symmetry in the high temperature phase of QCD
N. Evans, S.D.H. Hsu and M. Schwetz 262

On bosonization in 3 dimensions
D.G. Barci, C.D. Fosco and L.E. Oxman 267

Confinement and chiral condensates in 2d QED with massive *N*-flavor fermions
R. Rodríguez and Y. Hosotani 273

QED(1 + 1) at finite temperature – a study with light-cone quantisation
S. Elser and A.C. Kalloniatis 285

R_b, R_c and jet distributions at the Tevatron in a model with an extra vector boson
G. Altarelli, N. Di Bartolomeo, F. Feruglio, R. Gatto and M.L. Mangano 292

Diffractive production of vector mesons at large *t*
J. Bartels, J.R. Forshaw, H. Lotter and M. Wüsthoff 301

Elusive exotic states
H.-C. Kim and M. Shmatikov 310

A simple recipe to detect possible C-odd effects in high energy $\bar{p}p$ and pp
M. Giffon, E. Predazzi and A. Samokhin 315

The *x*-dependent helicity distributions for valence quarks in nucleons
B.-Q. Ma 320

(Continued on preceeding page)

PHYSICS LETTERS B

Volume 375, numbers 1,2,3,4 **16 May 1996**

Contents

(Continued from following page)

Perturbative corrections to zero recoil inclusive B decay sum rules
A. Kapustin, Z. Ligeti, M.B. Wise and B. Grinstein 327

Dispersive analysis of the decay $\eta \to 3\pi$
A.V. Anisovich and H. Leutwyler 335

Δs density in a proton and unpolarized lepton-polarized proton scatterings
T. Morii, A.I. Titov and T. Yamanishi 343

The ratio of gluon distributions in Sn and C
T. Gousset and H.J. Pirner 349

The influence of mass reduction on pion momentum spectra from relativistic collisions
P. Bi and Y. Shi 355

Addendum

Instantons and charmed baryon mass splittings [Phys. Lett. B 261 (1991) 493]
J. Dey, M. Dey and P. Volkovitsky 358

Erratum

Pion reabsorption in heavy-ion collisions interpreted in terms of the Δ capture process [Phys. Lett. B 366 (1996) 63]
R. Holzmann et al. 359

Cumulative author index to volumes 371–375 360